## *Observations of Sappho, made at the Cambridge Observatory by Mr. A. Graham with the Northumberland Equatorial and Square Bar-Micrometer.*

(*Communicated by Professor J. C. Adams.*)

| | Greenwich Mean Time. | Apparent R.A. | Apparent Decl. | Reduction to Geoc. Place in R.A. | Reduction to Geoc. Place in Decl. | Compared Star. | No. of Comps. | Correction of Ephemeris in R.A. | Correction of Ephemeris in Decl. |
|---|---|---|---|---|---|---|---|---|---|
| | | h m s | ° ′ ″ | s | ″ | | | s | ″ |
| 1888, April | 14·39868 | 13 18 25·38 | −12 8 0·05 | −0·12 | +4·66 | *a* | 10 | +6·69 | −34·34 |
| | ·39868 | 13 18 25·55 | −12 7 57·53 | −0·12 | +4·66 | *b* | 10 | +6·86 | −31·82 |
| | 16·40366 | 13 16 34·05 | −11 50 42·34 | −0·11 | +4·68 | *c* | 1 | +6·52 | −31·55 |
| | ·40366 | 13 16 34·57 | −11 50 43·06 | −0·11 | +4·68 | *d* | 1 | +7·03 | −32·27 |
| | 18·39188 | 13 14 45·35 | −11 33 29·92 | −0·11 | +4·65 | *e* | 10 | +6·82 | −31·98 |
| | 30·46232 | 13 4 35·66 | − 9 50 50·03 | +0·04 | +4·66 | *f* | 5 | +6·64 | −35·49 |
| | ·46536 | *g* − 0 54·84 | *g* + 4 23·16 | +0·04 | +4·66 | *g* | 4 | | |

*Mean Places of Compared Stars for* 1888·0, *with Reductions to Apparent Place.*

| | R.A. 1888·0. | Decl. 1888·0. | Reduction to Apparent Place in R.A. | in Decl. | Authorities. |
|---|---|---|---|---|---|
| | h m s | ° ′ ″ | s | ″ | |
| *a* | 13 16 13·16 | −11 59 31·23 | +1·31 | −5·86 | B. (W.) 13h, 230. |
| *b* | 13 20 48·23 | −12 7 26·43 | +1·31 | −5·70 | Greenwich Catalogue for 1872, 1230. |
| *c* | 13 13 42·57 | −11 53 37·34 | +1·31 | −6·04 | B. (W.) 13h, 193. |
| *d* | 13 14 6·57 | −11 52 45·88 | +1·31 | −6·04 | B. (W.) 13h, 202. |
| *e* | 13 12 56·35 | −11 25 30·00 | +1·31 | −6·14 | Place given in Mr. Bryant's Ephemeris. |
| *f* | 13 8 52·92 | −9 46 31·73 | +1·31 | −6·40 | Argentine Catalogue 18023. |
| *g* | 13 5 28 96 | −9 55 5·45 | +1·30 | −6·54 | By 4 comparisons with (*f*) April 30. |

On April 26, probably by some mistake in giving the time, a small star was observed instead of the planet. The places of several stars, deduced from 11 comparisons, with B. (W.) 13h·34 on that night may be useful to other observers.

| | R.A. 1888·0. | Decl. 1888·0. | Mag. | Reduction to Apparent Place in R.A. | in Decl. |
|---|---|---|---|---|---|
| | h m s | ° ′ ″ | | s | s |
| Assumed place of B. (W.) 13h·34 | 13 5 25·63 | −10 30 29·78 | 9 | +1·31 | −6·57 |
| | 13 6 33·79 | −10 25 6·44 | 9 | +1·31 | −6·51 |
| | 13 6 50·98 | −10 25 28·13 | 12 | +1·31 | −6·51 |
| | 13 8 52·82 | −10 27 9·38 | 9·6 | +1·31 | −6·43 |

*Note.*—The places of the above stars of comparison, as well as those of the stars in Mr. Bryant's Ephemeris, have been observed with the Cambridge Transit Circle, but the observations have not yet been reduced.

*Cambridge Observatory:* 1888, *May* 3.

## *Occultations of Stars observed during the Lunar Eclipse of* 1888, *January* 28. By E. Nevill, Government Astronomer.

By mischance we did not receive until two days after the eclipse the list of phenomena calculated for this observatory by Dr. Döllen, and so were dependent for our information on a copy of the list of stars occulted at the Cape, which was forwarded to us by Dr. Gill a few days before the eclipse.

The observations were made by myself with the 8-inch Grubb Refractor, power 125, the times being noted and recorded by my assistant, Mr. Grant

The Moon's limb, though eclipsed, was too bright to enable stars of the 10th or 11th magnitude to be observed with any certainty.

| Star. No. on Döllen's List. | Phenomena. | Observed Greenwich Mean Time. h m s | Star. No. on Döllen's List. | Phenomena. | Observed Greenwich Mean Time. h m s |
|---|---|---|---|---|---|
| 86 | Reapp. | 10 40 42·0 | 143 | Disapp. | 11 12 5·2 |
| 129 | Disapp. | 44 8·1 | 147 | Disapp. | 18 27·7 |
| 127 | Disapp. | 48 49·6 | 95 | Reapp. | 20 38·8 |
| 122 | Disapp. | 50 23·8 | 159 | Disapp. | 33 25·4 |
| 76 | Reapp. | 11 1 51·3 | 122 | Reapp. | 59 42·6 |
| 88 | Reapp. | 3 3·5 | 169 | Disapp. | 12 3 10·9 |
| 68 | Reapp. | 4 17·8 | 179 | Disapp. | 5 30·2 |
| * | Disapp. | 9 29·7 | 127 | Reapp. | 10 1·9 |
| 140 | Disapp. | 9 53·2 | | | |

In all 17, or 10 disappearances and 7 reappearances.

*Natal Observatory:*
1888, *April* 4.